

## We Claim:

1. An apparatus for estimating a manufacturing cost for a product comprising: an input device for receiving input data concerning physical characteristics of a product to be manufactured;

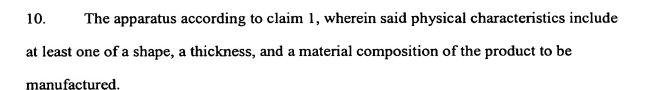
a cost calculation processor for calculating a manufacturing cost based on information inputted from said input device and cost factor data, supplied from an external source; and

a display device for displaying a calculated manufacturing cost from said cost calculation processor, wherein said cost calculation processor calculates a plurality of alternative manufacturing costs, with each alternative manufacturing cost being associated with a respective one of a plurality alternative process series for manufacturing the product, when a plurality of process series are entered via said input device; and wherein said display device displays the plurality calculated manufacturing costs for the plurality of process series.

- 2. The apparatus according to claim 1, wherein said cost calculation processor is arranged to calculate manufacturing costs for individual process steps of the plurality of process series; and wherein said display device displays the calculated manufacturing costs for the individual process steps.
- 3. The apparatus according to claim 2, wherein said physical characteristics include at least one of a shape, a thickness, and a material composition of the product to be manufactured.

The apparatus according to claim 3, wherein said external source comprises:
 a variable cost memory; and
 a fixed cost memory.

- 5. The apparatus according to claim 4, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an in-house net connection.
- 6. The apparatus according to claim 4, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an internet connection.
- 7. The apparatus according to claim 4, wherein said input device is located in an inhouse development department.
- 8. The apparatus according to claim 7, wherein said external source receives data from in-house production facilities and outsourced component makers.
- 9. The apparatus according to claim 8, wherein said in-house production facilities are connected to said external source via an in-house net connection, and wherein said outsourced component makers are connected to said external source via an internet connection.



- 11. The apparatus according to claim 1, wherein said external source comprises:
  a variable cost memory; and
  a fixed cost memory.
- 12. The apparatus according to claim 11, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an in-house net connection.
- 13. The apparatus according to claim 11, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an internet connection.
- 14. The apparatus according to claim 1, wherein said input device is located in an inhouse development department.
- 15. The apparatus according to claim 1, wherein said external source receives data from in-house production facilities and outsourced component makers.
- 16. The apparatus according to claim 15, wherein said in-house production facilities are connected to said external source via an in-house net connection, and wherein said



outsourced component makers are connected to said external source via an internet connection.

A method of estimating a manufacturing cost for a product, said method 17. comprising the steps of:

> entering physical characteristics data concerning the product to be made; storing the characteristics data in a first memory;

accessing a second memory storing cost factors provided by a plurality of producers;

calculating estimated costs for manufacturing the product relative to the plurality of the producers; and

displaying the estimated costs for the plurality of producers.

- 18. The method according to claim 17, further comprising the step of: updating the cost factors stored in the second memory by the plurality of producers.
- 19. The method according to claim 17, wherein said calculating step further includes figuring manufacturing costs for individual process steps of each of the plurality of producers; and wherein said displaying step further includes revealing the calculated manufacturing costs for the individual process steps.
- 20. The method according to claim 17, wherein said accessing step takes place via an internet connection.